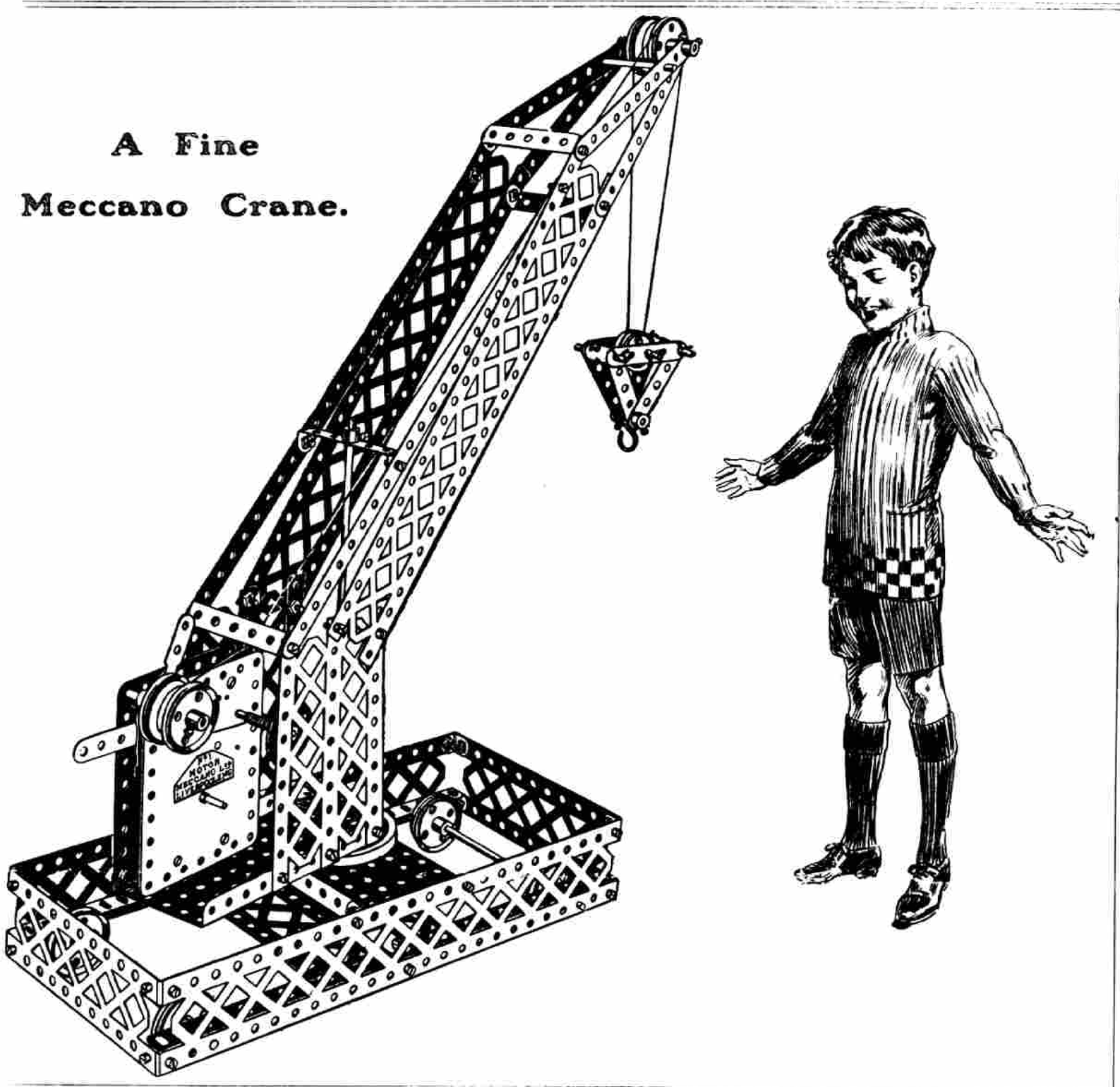
VOL. 1. No. 3 MARCH-APRIL, 1917.

MECCANO MAGAZINE

TO HELP MECCANO BOYS TO HAVE MORE FUN THAN OTHER BOYS

A Fine Meccano Crane.



Editorial

This number is a little late in making its appearance, but for that you boys must blame the paper makers and the printers, although to be quite fair to them they are having their full share of war difficulties, just as we are. Anyhow, now it *is* out, I am quite sure you will find many things to interest you in it.

The £200 Competition a Big Success.

As I write, the £200 Competition entries are coming in at a great pace, and there is no question about its being a big success. You boys will have to be a little patient in waiting for the results. There are many thousands of entries and each likely model has to be specially made up, and this is a slower business than usual with our sadly depleted staff. We will hurry all we can.

The Scientific Competition.

I am specially anxious that the Scientific Competition announced in this issue shall be a big success. I receive letters every day from head masters and teachers who use Meccano in teaching their pupils, and I want to show them as many uses for it as possible. You can help Meccano splendidly by contributing something to this competition.

High Praise and Good Suggestions from Meccano Boys.

I have received many thousands of letters from British boys telling me how pleased they are that Meccano boys have now a magazine all to themselves. "Ripping" and "top-hole" seem to be the favourite adjectives applied to it. Each day I am bombarded with suggestions for Meccano Clubs, Correspondence Clubs, and many others which I shall not disclose yet. I am considering all these very carefully, and as soon as possible I shall announce a scheme which I know will delight all my readers.

The Meccanograph.

This grand model continues to attract great interest. The new combined movement gives thousands of beautiful designs. I want all you boys to make one of these machines for yourselves and enjoy the fun. The Meccanograph Competition has produced excellent results, and shows me that even very young boys can do fine work without difficulty.

Meccano Boys and the War.

I want to give a special message of sympathy and good wishes to the many hundreds of Meccano boys who have written to tell me that their fathers or their brothers are out at the front or on the sea fighting for their country. Some of the messages sent to me are full of sorrow, and others breathe a spirit of brightness and hopefulness. There is hardly one of us whom this dreadful war has not touched, and with my young friends I pray for an early and favourable restoration of peace, and the safe return of our dear ones.

The Editor

The Life Story of Meccano

By Frank Hornby.

Every young healthy boy has hobbies, and I often think that the earnestness and thoroughness with which he pursues them is an index to the kind of man he will make when he grows up. It always gives me pleasure to see a boy following his hobbies with the greatest keenness, studying until he gets a thorough knowledge of them, and practising them until he is a thorough master of his games, because I know that when he grows up he will pursue his business in the same keen and thorough spirit.

It was a fortunate circumstance for me that I became interested in mechanics, and made my primitive workshop my hobby. I think that most boys commence their hobbies through some sort of accident, and the accident which got me interested in mechanics was the reading of a book which I had had given to me, containing the life stories of famous inventors, and the difficulties which they had encountered in working out their ideas, before success crowned their efforts. I was very young at the time, and this was one of my first books, and nothing which I have read since has exercised such a fascinating influence over me. I wanted to invent like Watt, who discovered the power of steam; like Benjamin Franklin, who discovered electricity, and all the other heroes I was reading about, but, of course, boy like, I did not know where to begin.

Just about that time perpetual motion was being very much discussed, and it seemed to me that if I could only solve this problem, I should have accomplished something very wonderful. I certainly should, but it did not take me very long to find out that I was attempting the impossible. Nevertheless, I got abundance of pleasure from making the attempt, and if my experience brought me no other success, it at least taught me something of mechanics and engineering.

I have now forgotten most of my inventions, but amongst them was a toy submarine which, on being placed on top of the water and set going, submerged itself, and was propelled under water. It might have been more successful if I could have got it to come to the surface again of its own accord, but this is just what it failed to do.

My own little workshop at home was my paradise, where I spent many happy hours working out all kinds of ideas. I had not many appliances or tools at my disposal, and when I wanted a device which called for great accuracy I had to pay some one to make it for me, which I remember always made a big hole in my pocket money. Each little device which I invented I patented, and I never had time to feel disappointed over the failure of an invention, because I was always ready with the next and brimming over with enthusiasm over it.

I went on in this way for many years, spending all my spare hours, happy as a lark in my little workshop, making all kinds of mechanical models to work by steam, electricity, or clockwork. There was no Meccano then, and I can tell you, boys, that I was hard put to it sometimes to devise and make some of the parts which I required. I often think now of the wonderful things which I could have made if I had had a Meccano outfit in front of me, to dip into when I wanted a new movement, and it is a firm conviction with me that it was the longing for an easier means of attaining the objects which I had in view in those days, which set me thinking along the lines which finally resulted in the introduction of Meccano.

(*To be continued.*)

RESULTS OF THE MECCANO ESSAY COMPETITIONS

In the last two numbers of the *Meccano Magazine*, we announced that we would award prizes for the best essays on "Meccano as a Toy" and "Meccano as a Help to the Study of Engineering," and below we have pleasure in reprinting the winning essays.

These competitions have been a great success, and it has been our pleasant duty to carefully read through many hundreds of literary efforts by Meccano boys. It is wonderful to learn how thoroughly the spirit of Meccano has been grasped by those boys who use and play with it. Enthusiasm for the hobby is the keynote of every essay sent in. The essays show great literary merit also, and in almost every case high intelligence is indicated in the boy who has written the essay.

A prize of a No. 2 Meccano Outfit for the best essay on "Meccano as a Toy" has been awarded to R. H. Cobbold, "The Rectory," Bratton Fleming, N. Devon, and a similar outfit has been awarded to David J. Nash, 90, Powerscroft Road, Clapton, N.E., for the best essay on "Meccano as a Help to the Study of Engineering."

Other essays sent in show great merit, and one of them is being printed in this issue. As soon as we can find space for them, we shall print others, and as each essay is printed we shall award the author a special prize.

Meccano as a Help to the Study of Engineering

Sent in by David J. Nash, 90, Powerscroft Road, Clapton, N.E.

Master Nash is sixteen years of age and is an Engineering Student at the Northampton Polytechnic, London. In 1911 he won a L.C.C. Junior County Scholarship which took him to Hackney Downs School, where he passed the University Junior Schools Examination with honours. After two more years he passed the London University Senior Schools Examinations and gained the Matriculation certificate. For this success the L.C.C. granted him another scholarship which he now holds at the Northampton Polytechnic. He is now planning to take the Intermediate B.Sc. (Engineering) Examination, and, if successful, to continue studies for the B.Sc. Degree. He has our warmest wishes, and also, we are sure, those of every Meccano boy.

Some few years ago a great percentage of boys, when asked what trade or profession they would like to follow, answered "An Engineer." Many only had vague notions as to what the term implied, and scarcely any knew what being an Engineer meant.

Nowadays, however, hundreds and even thousands of boys have had practical experience in the line of mechanical engineering, and this is the result of Meccano. Such boys are able to talk intelligently on engineering subjects with those who are in the engineering world, and are able to read with interest engineering periodicals.

But it is when the Meccano boy steps out into the engineering world that the full advantages of his Meccano training are felt. As one who has been a Meccano boy for a long while and has now commenced studying Engineering in earnest, I am able to speak with some amount of experience. On commencing studies, I found that my work in the mechanical department had been lightened considerably by Meccano. The principle of levers was already quite clear to me, and moments were picked up without trouble. I had seen how that by gearing, the Meccano motor could lift much heavier loads, but at a slower pace. Hence, when I came across "Mechanical Advantage" and "Velocity Ratio," they gave me no trouble. The action of the constantly occurring worm and worm gear was quite plain and straightforward to me, because I had met it in "Meccano." The relation between the sizes and relative speeds of toothed wheels was also quite plain. Though bevel gears had not been met directly, their action had been illustrated by contrate wheels.

Another field covered by Meccano is that of belt and chain driving. Here again Meccano had taught me much. The fast and loose pulley systems had been illustrated by Meccano, and the uses of crossed belts, cone pulleys, countershafts, &c., needed no explanation.

Thus it will be realised that the principles of Meccano are true Engineering principles, and that when a boy is enjoying himself with Meccano he is learning something of practical use and of great importance.

Let me here add an appreciation of the appendix to be found at the end of the Meccano Manual. Here many fundamental mechanical movements are illustrated, and much information may be gained by any willing to learn. Most boys are anxious to know how it works, and here we have the Centrifugal Governor (which is so widely used), Hooke's Coupling (the motion of which is so evasive), the principle of the inclined plane, the principle of levers, and many other fundamental movements made quite clear for even the youngest to understand.

Thus I, as one who has gained much from Meccano, am most glad to show my appreciation of the best constructive and instructive toy (which really is more than a toy) on the market, not only of Great Britain but of the whole world.

DAVID J. NASH.

Meccano as a Toy.

Sent in by R. H. Cobbold, The Rectory, Bratton Fleming, N. Devon.

Master Cobbold is a very bright boy of 11½. He is at present at school at Ellerslie, and he hopes to go on to Marlborough College in two years' time, and to become an engineer. He has won prizes at school, and has frequently been commended for the excellence of his essays.

There are toys *and* toys. Some are only toys. Meccano is a toy, but a jolly good one. It is never a waste of time to play with Meccano. You can begin when you are quite young and go on till you are quite an old boy.

It is a poor boy who does not know Meccano. You can play the best games of all with it. You can make almost anything in the way of machinery. In fact, there is scarcely anything worth making that cannot be made with Meccano. The only thing that is hard to make is a mistake, that is if you pay attention. And you can have competitions with other boys to see who can build quickest or strongest, or who can invent best or copy best. You do not know you are learning things, but you are all the time. Not many toys do that.

Meccano does not break as other toys do; and it is not nearly so expensive as many useless things which are only toys. It must be nearly worth its weight in gold. In Meccano you make your own toys; you make them work, too, especially if you have a motor.

It lasts such a long time because you treat it as a friend. There is only one thing cleverer than Meccano, and that is the man who invented it. When you are at work at it, it is not like a game which is the same each time. Meccano can be always different, and always more and more interesting. That is why it lasts so long. You have never finished.

An advantage in Meccano is that the pictures of the models are always true. In fact, the model you make is better than any picture of it. Then, you can always get spare parts if any should be lost. Of course, no Meccano boy loses them; they are too precious.

"Toy" rhymes with "boy" very happily; no two things go so well together. Also "noise" rhymes with "boys"; but there is this about Meccano—it is the most silent of toys. You can go on working so quietly that people do not know that you are in the room with them and they sometimes forget to say that it is time to go to bed.

Of all the fascinating toys
That kind folk give deserving boys,
This is the one that never cloys
And never anyone annoys;
The time it usefully employs,
And ne'er engenders any noise.

It happily the hump destroys,
And fosters educative joys;
Each faculty it well deploys,
And keeps the mind in equipoise;
A young mechanic nought enjoys
So much as this, the best of toys.

R. H. COBBOLD.

Meccano as a Help to Engineering

Sent in by Hector H. Beard, Gorsty Knoll, Nr. Coleford, Glos.

This is a very neat essay which other boys will do well to read carefully. Hector is a very keen Meccano boy of 14, and his essay shows a seriousness of purpose which gives promise of quick advancement in his work. Although he did not gain the first prize, we have awarded him a special prize of an Inventor's Outfit.

I commenced to work with a No. 0 set of Meccano at the age of 10 years, following the instruotions. I could soon make all the things that were illustrated; then I had a much larger set of Meccano, and this helped me so much with my ideas that owing to working with the Meccano I made up my mind I would be an engineer. I could see the very interesting work the Meccano could teach me. I have been adding to my collection of Meccano as often as possible.

I was 14 years of age on the 25th November, and I was apprenticed to a firm of engineers. I went a month on a trial, but before the month was up my parents were sent to, to say the firm would be glad to accept me as an apprentice, that they could see I had it at my fingers' end, and asked me had I been studying engineering books or what. I told them "No," but that I had been working with my Meccano, and the reply they made was this: "Well, if yours is a case of working with Meccano, it must be a grand thing for a boy to study." I consider that my Meccano has been the starting point in my life, of how to become an engineer, and I feel sure that it has helped me a great deal in getting in with the firm. I am in "The Forest Dean Engineering Company." I am deeply interested in my work, and I owe it all to my Meccano, and if I get on well I shall owe it all to using the Meccano. I have worked with mine all day long, and only left it to take my meals, and each part seems full of interest to me. Therefore, I consider Meccano is not only an interesting and pleasant pastime, but also that it gives boys such a splendid insight into all the different parts of engineering. I have three other brothers who are all keen on Meccano, and I can say honestly that if we turn out a family of engineers, we shall owe it all to your splendid gift of Meccano to boys.

Extracts from Competition Essays.

"It is lovely to have Meccano to play with when one is ill in bed. It makes one quite sorry to have to get up and go to school."—Fred Deakin, Havana House, Whitchurch, Salop.

"Meccano! That household word which sends a thrill of pleasure through the heart of every British youth."—Robt. Davison, 13, Frederick Street, Seaham Harbour.

"I am sure a boy who possesses a complete outfit is as rich, as regards material, as the best engineer in the country."—Leonard Roxborough, 127, Medlock Street, Kirkdale, Liverpool.

"I think the only person who hates Meccano must be Satan, for so many hands are busy making Meccano models and toys that he cannot find any idle ones."—D. W. Hall, 4, Mayfield, Mount Wise, Newquay.

"In the future the nation will produce a class of engineers that has never been excelled before, due to the popularity of Meccano amongst the boys of this country. As if by magic the little strips transform into bridges, cranes, wagons, or anything the owner wishes to build."—Louis Cunliffe, 46, Vine Street, Newton Heath, Manchester.

"The boy who is not a Meccano boy stands a poor chance compared with the Meccano boy, as he cannot know so much about the construction of machines as the lover of Meccano."—E. Dedman, 71, Kingston Road, New Malden.

"Many a night when I have been rather down in the mouth and had nothing to read, I just thought of my Meccano. That put everything right. I would be working away at a model in a minute and whistling as though the world belonged to me."—David Eaglesham, 98, Paisley Road, Renfrew.

"'The Meccano Boy is like Oliver Twist,' my mother says, 'always longing for more.'"—Harold Hy Anderson, Ivy Lea, Baildon, nr. Bradford.

The Meccanograph Competition

We have been delighted to see the great interest which Meccano boys have taken in this Competition. A very large number of excellent designs have been sent in, many of them of great beauty. The prize of a No. 3 Meccano Outfit has been won by David Briggs, of Brigg, Lincolnshire, who has submitted a very fine set of designs, a number of which we may be able to reproduce later. This competition has shown us that the Meccanograph has aroused the keenest interest amongst Meccano boys, and we hope to commence a new competition shortly, which will give them a further opportunity of showing their skill.

The designs submitted by L. Agger, Queenstown, Ireland; A. B. Grosvenor, Brightlingsea, and C. Tuck, Lancaster, show special merit.

A Grand New £200 Prize Contest

First Prize £50 in Cash

MORE THAN 150 PRIZES IN CASH AND MECCANO OUTFITS, Etc.

The 1916-17 Meccano Prize Competition has now come to a close, and has proved a tremendous success, more than 25 per cent. more Meccano boys having taken part in it than in any previous competition. The interest which boys take in these contests is enormous, and we are immediately commencing another one, on the same lines as the last. Prizes in cash and in outfits to the value of over £200 will be awarded, and this time we have decided to increase the prizes by making an award to the inventor of every model which the judges consider will be interesting to other Meccano users. So get to work at once, boys, and send in photos or drawings of that new model which you have taken so much pleasure in inventing, and building, and playing with. If the prizes total £500 in value we shall be all the more pleased. Get an entry form from your dealer, or send to us for one.

There are no restrictions or entrance fees; any Meccano boy can compete, and you are just as likely to win a prize with a No. 0 outfit as with a No. 6. This competition will close on March 1st, 1918.

A New Meccano Scientific Competition

The Meccano system of interchangeable standard parts besides being an admirable system of mechanical toy construction also lends itself to the construction of many models for use in demonstrating scientific principles. The models at present used for this purpose are very expensive and, further, a full set of models would only comprise a single-unit model for demonstrating each particular principle. As a consequence, it is usual in science classes to have the class split up into pairs of students, each pair on a different piece of apparatus. This necessarily reduces the efficiency of the teaching, inasmuch as the teacher has to distribute his attention over many different and separate lessons taking place all within the one class. Anything like collective laboratory teaching is therefore out of the question. With the same standard interchangeable Meccano parts, very many pieces of apparatus suitable for demonstrating different principles may be constructed, and, therefore, with a good outfit of Meccano parts a class may be provided with a number of identical scientific apparatus models all made for demonstrating the one feature, and, further, these models by being built up by the students themselves develop the constructional capacity of the student, and then, after such models have been utilised for a particular demonstration, the apparatus may be dismantled and the same parts used to rebuild other apparatus for demonstrating other features. Collective teaching is thus quite possible.

The Meccano parts being made of metal and accurately to gauge, respond quite readily to the construction of even the most sensitive apparatus.

With a view to developing this side of the Meccano business, we are organising a Prize Competition for models particularly directed to this application of Meccano. We feel convinced that there are many bright Meccano boys who are students in technical and other classes and to whom this aspect of Meccano will readily appeal. We invite our scientific young friends to enter for this competition. Prizes will be awarded for the best models suitable for scientific demonstration, and also for suggestions of suitable parts not already in the Meccano outfits which would be helpful in building such scientific models. Competitors will, of course, remember that the cardinal rule making for success in this competition will be simplicity in the construction of the model, any over-elaboration in construction in a model designed to demonstrate scientific principles being, of course, quite out of place. The rules governing our ordinary competition will also obtain in this case, the decision of the Meccano scientific experts being final. Competitors should send clear sketches, or photographs of their models, together with any experimental data arrived at in using the apparatus.

We offer the following list of suggestions for model apparatus as being typical of the kind to which competitors should direct their attention. The list is not to be taken as exclusive, but is offered merely by way of example :—

Model showing construction of braced girder work.
Model of quick return motion for a lathe or slotting machine.
Model of crank and connecting rod.
Apparatus illustrating the principle of a centrifugal governor.
Model of Hooke's or universal coupling for driving shafts not in line.
Apparatus illustrating the orders of pulleys.
Apparatus for determining the efficiency of pulley systems.
Model of wheel and axle.
Apparatus for showing the efficiency of spur gear trains and worm wheel drives.
Apparatus for illustrating the principles of the lever.
The triangle of forces.
Apparatus for showing the thrust and tension in the jib and tie rod of a crane.
Apparatus for determining the stress in a roof truss and for determining the forces acting at the crosshead of an engine.
Apparatus for demonstrating the principles of the inclined plane.

The prizes will be as follows :—

1st Prize .. One No. 5 Meccano outfit in wood cabinet.
2nd Prize .. One No. 4 Meccano outfit.
3rd Prize .. One No. 3 Meccano outfit.

There will be additional prizes consisting of No. 1 and No. 2 outfits, &c. Entries must reach us by December 31st, 1917, and must be marked "Scientific Competition." No entry form is necessary. There are no entry fees, or restrictions of any kind in this competition.

The New Meccano Manual of Instructions

Have you secured your copy of this fine new Manual yet? No Meccano boy should be without it. It means happy evenings the entire winter through. If you were to commence now to make the 326 fine models which it contains, it would take you years to get through them. It establishes the superiority of Meccano once and for all, and it puts every other toy in the shade. It contains a large number of prize-winning models in the last two Meccano competitions, the work of boys, who have shown most extraordinary genius. It trebles the value of any outfit purchased last year or earlier. Get your copy at once from your regular dealer, or from us if you have any difficulty. Price 1s. 3d. or 1s. 6d. post free.

INSIST ON MECCANO

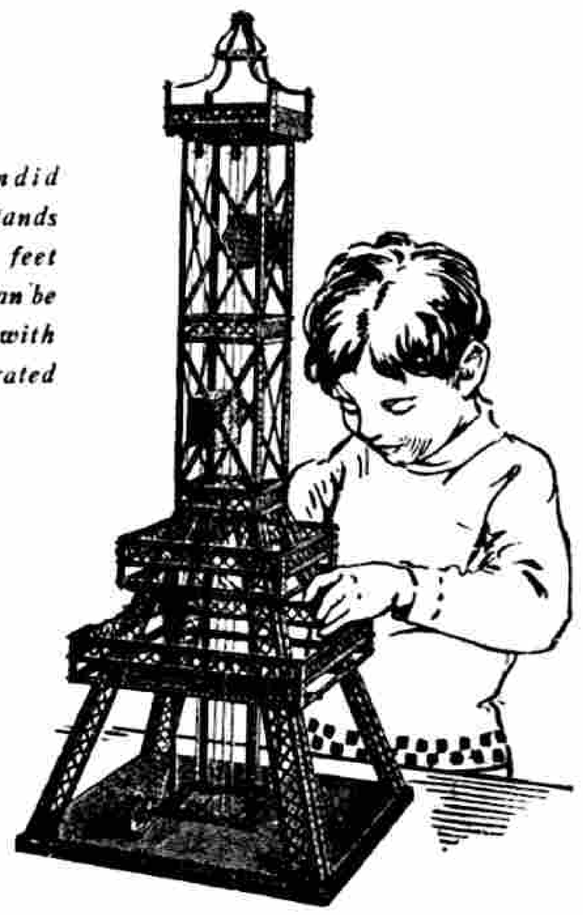
Meccano is a system of parts, each one representing a correct engineering element, such as would be used by skilled engineers in actual work. There are no parts like them; they are patented and cannot be imitated, and without them you cannot build correctly.

WARNING.—To be genuine your outfit must bear the trade mark "Meccano." If it does not, you will get a worthless imitation and will be disappointed.

How to get the Meccano Magazine Regularly

Under the new Government regulations we are unable to send the "Meccano Magazine" to any one except those who directly apply to us for it. If, therefore, you wish to become a reader of the M.M. it will be necessary for you to forward to us a request for it to be sent to you regularly, accompanied by 2d. in stamps for postage on the next four issues.

A splendid model; stands about 6 feet high. Can be fitted with lifts, operated by the Meccano Electric Motor.



The Meccano Eiffel Tower

It Can Be Done

Somebody said that it couldn't be done;
But he, with a chuckle, replied—
That "maybe it couldn't" but he would be one
Who wouldn't say so till he'd tried.
So he buckled right in with a trace of a grin
On his face. If he worried, he hid it.
He started to sing as he tackled the thing
That couldn't be done, and he did it.

Somebody scoffed: "Oh, you'll never do that—
At least, no one ever has done it."
But he took off his coat and he took off his hat,
And the first thing he knew he'd begun it.
With the lift of his chin and a bit of a grin,
If any doubt rose he forbid it;
He started to sing as he tackled the thing
That couldn't be done, and he did it.

There are thousands to tell you it cannot be done,
There are thousands to prophesy failure;
There are thousands to point out to you one by one
The dangers that wait to assail you.
But just buckle right in with a bit of a grin,
Then take off your coat and go to it;
Just start in to sing as you tackle the thing
That cannot be done, and you'll do it.

GIVING HIM A PLAYMATE.

Aunt: Tommy! How cruel! Why did you cut the poor worm in two?

Tommy: He seemed so lonely.

OUR MAIL BAG

The Editor has a little talk in this column with his Meccano boys. Whether he has space to reply to them all here or not, he is always glad to hear from them. He receives hundreds of letters each day, and only those which deal with matters which are likely to interest other Meccano boys can be dealt with here.

Correspondents will help the Editor if they will write on one side of the paper only.

A. W., Shepherd's Bush.—It is an excellent idea to lay aside your overtime money in order to purchase a No. 6 Outfit. We hope you will not have long to wait. Very pleased you like Meccano so much, and that your dad thinks so highly of it.

B. S., Manchester.—Too bad of your young sisters to fill up keyholes with your nuts and bolts. Manchester is not far away, and my word if we come over!

A. J. L., Walton-on-Thames.—Glad your wishing-bone secured you a good Meccano outfit. We must try this ourselves.

E. M., Newcastle, Staffs.—"If I were king, the inventor of Meccano would soon be known to the world as Baron Meccano, in recognition of the services rendered to young England!"—Oh! that you were king, E. M. The inventor tells us, however, that the honour which he covets most is that he may find a warm place in the thoughts of all Meccano boys.

J. E., Wood Green.—Nonsense, J. E. You stand just as good a chance of winning a prize with your No. 1 outfit as you would with a No. 6. It is the simple ingenious models which take most of the prizes. We like your letter and appreciate the way you champion Meccano amongst your friends.

R. S., Wandsworth Common.—We are very interested in hearing that you have been a Meccano boy for 12 years. You must be one of the oldest members of our big family.

Eric J., Denbigh.—Let us know how your Meccano Club progresses. Accept our best wishes for its success.

W. E. G., Handsworth.—Thanks for photo of your son with his Meccano models. We are happy in knowing that his hobby has benefited him. We trust he will eventually be fully restored to health.

Edward M., Urmston.—"I say that Meccano is worth ten times what you charge; and that is my soul verdict."—And a highly creditable verdict too. But why be timid over the Meccano Competitions? There are excellent prizes and no risks.

Mrs.G., Platt Bridge.—Glad to know of the pleasure which Meccano brings to your boys of eight and four years. Thanks for your kind letter.

Edwin B. G., Dover.—"I think the *M. M.* is a ripping paper, and Meccano a top-hole hobby."—A bit slangy, Edwin, but otherwise the sentiment is excellent.

Norman J., Middleton.—"My word! you have a big mail bag."—My word! we have. We get several hundreds of letters a day, and each one as welcome as the flowers in Spring.

Gunner D. W. T., Catterick.—Why should it seem "kiddish" to use Meccano at your age? Men of eminence are working with it and playing with it every day that goes by. The Meccano boys who are now fighting for their country form a goodly army, and, like yourself, many of them owe their knowledge of mechanics to their hobby.

H. A., Derby.—"At school last week our teacher told us to write a composition on 'How I would spend £1.' Nineteen boys said they would buy a Meccano Outfit."—We doubt if they could spend their money to better advantage. Meccano is a great brain developer.

T. W. R., Shrewsbury.—It was a pleasure to read your letter. That you can find time to make Meccano models for your local toy dealer's window and do other work for him, when you go to your engineering work at 5-30 a.m., shows a keenness for your hobby which makes us prophesy great things for you later.

F. G. W., St. Bees School.—There is no charge made for the *M. M.*, and the stamps which you have sent are for postage only. Glad to know that you prefer Meccano to diamonds.

D. M., Sanderstead.—For your boy of six to make all the No. 1 models unaided shows aptitude for engineering which we think you should encourage. Please give Harold our warmest wishes. When he can write we hope to receive one of his first letters.

C. S., Sheffield.—"Although I am now getting well above the age of toys, I still use Meccano."—Why! what age are you, C. S.? We know hundreds of boys round 60 who make Meccano models. You are not older than that, are you? Read reply to G. H., Cambs.

J. S., Retford.—Your suggestion for a new competition strikes us favourably, and we will keep it before us. Thanks also for suggestion for new part, which we will consider.

L. B., Whetstone.

Mothers, don't worry about your boy,
Encourage and help him to play with his toy,
Content, quiet and happy he'll grow
Could you purchase a box of Meccano, you know.
And knowledge he'll gain, and happiness too,
No trouble or worry he'll then be to you.
Oh! three cheers for lovely Meccano.

A little wobbly in places, but the sentiment is admirable.

Francis and Geoffrey, Bexhill.—We liked your nice letters and we liked your photographs. Write again soon.

W. P., Brightlingsea.—It was nice of you to think of asking us to come to your birthday party, but you are such a long distance away and there is so much to be done here. We hope you all enjoyed yourselves.

F. K., Sunderland.—It pleases us to know that you realise what an important part Meccano is playing in the education of your boy. You could hardly do better than put him to engineering.

G. H., Cambs.—"To me Meccano is much more than a toy, and it has been my interesting hobby for many years. I am now 70 years of age and I find Meccano of great use in illustrating mechanical inventions."—We receive many letters from gentlemen in your profession, telling us of the help which Meccano has been to them. We hope you will be interested in the Scientific Competition announced in this issue.

W. G. S., Lichfield.—"I never lose an opportunity of introducing Meccano to either boys or parents. As a Scoutmaster, I have good opportunities of doing so, and I count it as one of my 'good turns.'"—An excellent example for other scouts to follow.

J. T., Manchester.—"My young relative is a Meccano enthusiast, and is often invited by his teacher to bring his outfit to school and give a demonstration to his class."—We have received very many letters recently in the same strain. It is now only the inefficient teachers who do not understand and use so valuable an aid to their work.

E. W. A., Wanstead.—"This Christmas my parents promised me an Accessory Outfit if I passed my music examination, so you may guess I worked hard. I passed the examination, and I got my outfit."—A little while ago a Meccano boy wrote to tell us that he had joyfully allowed the dentist to extract two of his teeth, because he was buoyed up with a similar promise from his mother. These mothers of ours are very artful.

A. E. R. (Miss), Han[illegible] Mansions.—Meccano girls are just as dear to us as Meccano boys. Write us often.

Connie G., London.—"Although I am a girl, I take great interest in my Meccano No. 4."—We are always very glad to hear from such keen Meccano girls as your letter proves you to be. Some day we may be able to arrange special competitions for the girls all to themselves.

F. S., Darlington.—"I was a user of Meccano when three years old. That beats all records, does it not? I am now 13 and keener than ever."—A great many boys have written to say they started Meccano at four, but yours beats this, Francis. Many thanks for your kind wishes.

D. J. D. S., Upper Clapton.—"I am told I am too old at 15¾ for Meccano."—Who told you such a foolish thing, D. J. D. S.? Why, you are only just arriving at the right age to get the greatest enjoyment out of it. Of course, you "don't feel like chucking it!"

Kathleen E. M., Hornsey.—We admire your determination to try again in the Competition, and we hope you will succeed this time. We are glad to hear from such a keen Meccano girl.

Eric N. G., Porthcawl.—We found your letter very interesting indeed. Mr. Hornby was pleased to receive your kind message. Evidently you found Meccano parts very useful in fitting up the stage properties for your amateur theatricals. We note that you are just the same age as Meccano.

Phyllis P., Brandon.—We are very much aware of the fact that we have Meccano girls as well as Meccano boys, and bright, intelligent girls you are, judging by your letters.

V. F. H., Longton.—It is a splendid idea for you to start a Meccano Society in Longton to have meetings, build models, and discuss Meccano problems. Let us know how you get along.

J. K. H., Henlow.—Thanks for your very interesting letter, and for championing the cause of Meccano so enthusiastically. You will see that we are reproducing the photographs of winning competitors, and we shall continue this as far as we are able in future competitions.

H. S., Great Horton.—"One day at school we had to write an essay on 'The Toy I like best,' and the teacher thought we had cheated, as every boy in the class had got Meccano as best toy."—We prophesy great future success for the boys of Gt. Horton.

Stanley W., Letchworth.—"I say, isn't the *M.M.* jolly fine! Please keep it going."—We will, Stanley, and we will improve it every issue. Competition entries received.

D. B., Brigg.—"I have a daughter 17 months old who will never be quiet when we have Meccano out, unless she is allowed a screwdriver, which she already knows how to apply."—Our poor brain is commencing to reel. Surely no one can go farther back than this.

S. B., Luton.—"I think I would rather stay at home and read the *M.M.* than go to a Picture Palace."—This is true fame, S. B.

E. C., Regent's Park.—"My Meccano takes the place of a brother, as I have none." This is one of the nicest things we have had said to us.

W. M., Sheffield.—The inventor of Meccano is a little older than he looks, but not so young as he feels. Since he commenced to receive such bright letters from you boys he grows younger every day.

D. A. S., Leicester.—We liked your letter very much, and were very interested in hearing that your printing machine is fixed up with Meccano, that you make buzzers for your bicycles with it, lamp shades, soldiers' forts, signalling apparatus for sick patients, &c. We are glad to hear that you like the Meccano boy in our advertisements, and that not one of your chums will have any imitation of Meccano.

Leslie C., Brighton.—If you are not quite old enough to invent such a model as the Meccanograph, we are sure that you are quite clever enough to make it and to enjoy drawing beautiful designs. We will help you if you have any trouble. Hurry up and get well, and tell your mother there is no need to apologise for your handwriting; it is very good indeed for a boy of 10.

L. B. W., Acton.—You seem to have a good sort of a dad, who buys you nice outfits when you want them. Did you get the No. 5A at Christmas?

Prices of Meccano

No.			
0	Outfit with full instructions for building		4/6
1	do.	do.	7/6
2	do.	do.	13/6
3	do.	do.	20/-
4	do.	do.	32/6
5	do.	do.	47/6
6	do.	do.	115/-

No. 6 in well-finished cabinet with lock and key.

Accessory Outfits

No.							
0a	converting a	No. 0	into a	No. 1	..		3/6
1a	do.	do.	1	do.	2	..	7/-
2a	do.	do.	2	do.	3	..	8/-
3a	do.	do.	3	do.	4	..	13/6
4a	do.	do.	4	do.	5	..	14/-
5a	do.	do.	5	do.	6	..	37/6

Meccano Outfits with Electric Motors

These are the regular Meccano outfits with the Meccano Electric Motor added. Each one is a magnificent present for any boy.

No. 1x	with	non-reversing motor	13/6
,, 2x	,,	,, ,,	19/6
,, 3x	,,	reversing motor	30/-

Each Meccano outfit is complete with all parts and tools necessary for building models. Full instructions are included and the youngest boy can commence to build at once without study. An accessory outfit may be purchased at any time enabling bigger and more interesting models to be built. Additional parts may also be purchased separately, at prices given in our published lists.

Remember that though boys play with Meccano for pleasure, and though they get more genuine fun from it than from any other toy, it also gives them a sound knowledge of engineering. Through playing with Meccano, many a bright boy has been started on a prosperous career in one of the most important and profitable professions—engineering and mechanics.

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